No. 7500050

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Rogers Brothers Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Splendorgold'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, DC this 18th day of June in the year of our Lord one thousand nine hundred and seventy-six

Attest:

L. N. Rollin
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz
Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

| 1. VARIETY NAME OR TEMPORARY DESIGNATION | 2. KIND NAME | FOR OFFICIAL USE ONLY |
|---|---|---|
| Splendorgold | Snap bean | PV NUMBER 7500050 |
| 3. GENUS AND SPECIES NAME | 4. FAMILY NAME *(Botanical)* | FILING DATE 1.21.75 / TIME 3 P.M. |
| Phaseolus Vulgaris | Leguminoseae | FEE RECEIVED $ 250 / BALANCE DUE $ — |
| | 5. DATE OF DETERMINATION: Spring 1974 | $ 250 / $ — |
| | | $ 250 / $ — |

| 6. NAME OF APPLICANT(S) | 7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* | 8. TELEPHONE AREA CODE AND NUMBER |
|---|---|---|
| Rogers Brothers Company | Rogers Brothers Company<br>P. O. Box 2188<br>Idaho Falls, Idaho 83401 | 208-522-0110 |

| 9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* | 10. STATE OF INCORPORATION | 11. DATE OF INCORPORATION |
|---|---|---|
| Corporation | Delaware | 1958 |

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Charles Green, Administrative Assistant
Rogers Brothers Company
P. O. Box 2188
Idaho Falls, Idaho 83401

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

[X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*

[X] 13B. Exhibit B, Botanical Description of the Variety

[X] 13C. Exhibit C, Objective Description of the Variety

[X] 13D. Exhibit D, Data Indicative of Novelty

[X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

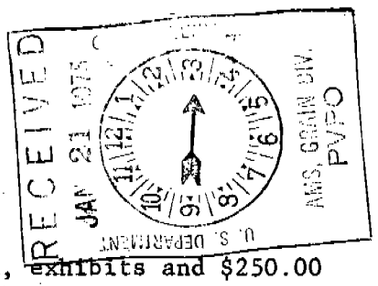
The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

*The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.*

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

January 16, 1975 (DATE) — Charles Green (SIGNATURE OF APPLICANT)

January 16, 1975 (DATE) — 1 (SIGNATURE OF APPLICANT)




## INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

**ITEM**

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

SPLENDORGOLD

Snap Bean

## EXHIBIT A

### Origin and Breeding History of the Variety

SPLENDORGOLD, a mid-season, wax podded garden bean, was derived from the following hand-pollinated cross:

EARLIWAX X GALLATIN 50

The above cross was made during the fall of 1962 and the following series of selections followed:

| Year | Generation | Plot * | Harvested |
|---|---|---|---|
| 1963 | F2 | 63375 | 20 single plant selections |
| 1964 | F3 | 641408 | 3 single plant selections |
| 1965 | F4 | 651045-D | 7 single plant selections |
| 1966 | F5 | 66693-4 | 2 single plant selections |
| 1967 | F6 | 67736 | 13 ounce bulk harvest |

* The plots listed above were only one of the several that were increased from each previous generation.

The 13 ounce sample of 67736 was treated as 68252 and the balance was increased as plot 68686 during the 1968 season. The harvest from these plots was increased during the 1969 season followed by a winter increase planting during the winter of 1969-70. The initial seed stock increase of SPLENDORGOLD in Idaho was made during the summer of 1970. Area adaptability and processing trials conducted both in the U.S. and abroad during ensuing years reveal good range of acceptability. An improved pure line that was harvested as a single plant selection during 1968 has been increased and released for production increase as stock 72462. It has produced a lower frequency of flat pod rogues than the original line. This new line is the basis for description information for this application. Several smaller pure line selections are presently being evaluated and the best of these will be increased and held in reserve as new pure lines to maintain the variety SPLENDORGOLD.

Variant types occurring in SPLENDORGOLD have consisted of approximately one flat pod per 2,500 plants; one string pod per 20,000 plants; and one greenpod per 15,000 plants. Dry seed color has varied from light buff to white. When seeds having white seed coats have been removed and planted separately, dry seed coat colors ranging from buff to white have been harvested. It is speculated then that the white seeds are the light buff type that have bleached.

SPLENDORGOLD

Snap Bean

EXHIBIT B

Botanical Description of the Variety

SPLENDORGOLD is a mid-season wax podded snap bean variety that is three to four days later than the variety Earliwax and has a similar bush habit. The bush is approximately two inches taller than Earliwax, is erect, open and determinate, and has medium to small leaves. The pods are longer and fleshier than the pods of Earliwax and seed and fiber development are slower. SPLENDORGOLD therefore has better holding quality. The pod color is a deep gold and uniform color. SPLENDORGOLD yields a higher percentage of large sieved pods than is common with Earliwax (approximately 40% five sieve or larger for SPLENDORGOLD compared to approximately 30% for Earliwax). SPLENDORGOLD is common mosaic virus resistant and is tolerant to yellow bean mosaic.

SPLENDORGOLD

EXHIBIT D - SUPPLEMENT

DATA INDICATIVE OF NOVELTY

SPLENDORGOLD most nearly resembles Kinghorn Wax except SPLENDORGOLD is resistant to Common Bean Mosaic, BV1 and NY15 strains, whereas Kinghorn Wax is not resistant to Common Bean Mosaic.

Also SPLENDORGOLD has a grey-buff seed color whereas Kinghorn Wax has white seed color.

SPLENDORGOLD

Snap Bean

EXHIBIT E

Statement of Applicant's Ownership

Rogers Brothers Company, P. O. Box 2188, Idaho Falls, Idaho, believes it to be the sole, original and first breeder of the "SPLENDORGOLD" variety of snap bean for which it solicits a certificate of protection.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-12
(11-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Bean)

# OBJECTIVE DESCRIPTION OF VARIETY
## BEAN (*PHALEOLUS VULGARIS*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Rogers Brothers Company

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P. O. Box 2188
Idaho Falls, Idaho 83401

FOR OFFICIAL USE ONLY

PVPO NUMBER
75-50

VARIETY NAME OR TEMPORARY DESIGNATION
Splendorgold

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

**1. TYPE:**

[1] 1 = SNAPBEAN  2 = GREEN SHELL  3 = DRY EDIBLE  4 = MULTIPURPOSE

**2. SEASON AND REGION OF ADAPTABILITY IN THE U.S.:**

[2] Grows best during: 1 = SPRING  2 = SUMMER  3 = FALL  4 = WINTER

[6] Best adapted in: 1 = NORTHWEST  2 = NORTHCENTRAL  3 = NORTHEAST  4 = SOUTHEAST
5 = SOUTHWEST  6 = MOST REGIONS

**3. MATURITY** *(Days from seeding to first harvest):*

[5][7] GREEN PODS  [6][4] GREEN SHELLS  [9][5] DRY SEEDS

[0][4] NO. DAYS EARLIER THAN ---------- [1]
[0][1] NO. DAYS LATER THAN ---------- [3]

1 = TENDERCROP  2 = KENTUCKY WONDER  3 = KINGHORN WAX
4 = WHITE KIDNEY  5 = MICHELITE 62  6 = DWARF HORTICULTURAL
7 = BUSH BLUE LAKE  8 = OTHER *(Specify)*

**4. PLANT:**

[1] 1 = DETERMINATE, ERECT BUSH  2 = DETERMINATE, SPRAWLING BUSH
3 = DETERMINATE, SEMIPOLE  4 = INDETERMINATE, POLE

[0][3][6] CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE

[0][0][3] NUMBER PRIMARY BRANCHES PER MAIN STALK

[ ][ ] CM. SPREAD

[2] Branching habit: 1 = COMPACT  2 = OPEN

[ ][ ] NUMBER INTERNODES ON MAIN STALK BETWEEN PRIMARY LEAF AND BASE OF TERMINAL INFLORESCENCE

[0][1] CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF

[ ][ ] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

[1] Main stalk: 1 = BRITTLE  2 = WIREY  [1] 1. STOUT  2. THIN

[2] Flower position:
[2] Pod Position:
1 = LOW, CONCENTRATED  2 = HIGH, CONCENTRATED  3 = SCATTERED

**5. LEAVES:**

[1] 1 = SMOOTH  2 = WRINKLED  [1] 1 = DULL  2 = GLOSSY  [1] Thickness: 1 = THIN  2 = MEDIUM  3 = THICK

[1] Size: 1 = SMALL *(Earliwax)*  2 = MEDIUM  3 = LARGE *(Tendercrop)*  [ ] CM. PETIOLE LENGTH *(To basal leaflets of first trifoliate leaf)*

[1] Tip shape of center leaflet: 1 = ROUNDED  2 = TAPER POINTED  3 = SHARP POINTED

[2] PUBESCENCE - Dorsal:
[1] PUBESCENCE - Ventral:
1 = NONE  2 = SLIGHT  3 = CONSIDERABLE

[2] Color: 1 = LIGHT GREEN *(Bountiful)*  2 = MEDIUM GREEN  3 = DARK GREEN *(Bush Blue Lake)*

**6. FLOWERS:**

[1] Color: 1 = WHITE 2 = CREAM 3 = PINK 4 = LILAC 5 = PURPLE
6 = OTHER *(Specify)*_____

[3] Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT [ ] NUMBER FLOWERS PER RACEME

**7. FRESH PODS:** ***(Edible maturity, averages for 10 pods)***

[7] Color: 1 = LIGHT GREEN *(Bountiful)* 2 = MEDIUM GREEN *(Tendergreen)* 3 = DARK GREEN *(Wade)*
4 = LIGHT YELLOW *(Brittlewax)* 5 = GOLDEN YELLOW *(Cherokee Wax)* 6 = GREEN-RED VARIAGATED *(Horticultural)*
7 = OTHER *(Specify)* Earliwax

[1][2] CM. LENGTH [0][9] MM. WIDTH *(Between sutures)* [1][0] MM. THICKNESS [0][9] WIDTH / THICKNESS X 10

[4] Cross section pod shape: 1 = FLAT 2 = OVAL 3 = CREASEBACK 4 = ROUND

[2] Curvature: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] Pubescence: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[2] Constrictions: 1 = NONE 2 = SLIGHT 3 = DEEP

[2] Spur: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] Surface: 1 = SHINY 2 = DULL

[1] Surface: 1 = SMOOTH 2 = BLISTERED

[2] Pod flesh: 1 = LIGHT 2 = DARK

[1] Pod flesh: 1 = FIRM 2 = WATERY

[12] MM. SPUR LENGTH

[2] Suture string: 1 = PRESENT 2 = ABSENT

[2] Fiber: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[2] Seed development: 1 = SLOW 2 = MEDIUM 3 = FAST

[5] NUMBER OF SEEDS PER POD

[6] NUMBER PODS PER PLANT *(Once over harvest)*

[6] NUMBER MARKETABLE PODS PER PLANT *(Once over harvest)*

[1] Machine harvest: 1 = ADAPTED 2 = NOT ADAPTED

**8. SEED COAT COLOR:**

2 R15 [~~1~~] 1 = MONOCHROME 2 = POLYCHROME

[2] 1 = SHINY 2 = DULL

[3] Primary color: 1 = WHITE 2 = YELLOW 3 = BUFF 4 = TAN
[11] Secondary color: 5 = BROWN 6 = PINK 7 = RED 8 = PURPLE
9 = BLUE 10 = BLACK 11 = OTHER *(Specify)* Grey

[0] Color pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

[1] Secondary color location:
1 = HILAR RING 2 = HILAR SURFACE
3 = STROPHIOLE 4 = MICROPYLE
5 = SIDES 6 = DORSAL SURFACE
7 = NOT RESTRICTED TO ANY AREA 8 = COMBINATION OF LOCATIONS *(Specify)*_____

[2] Hilar ring: 1 = NOT PRESENT 2 = NARROW 3 = BUTTERFLY SHAPED

[2] Vein-like under coat pattern: 1 = ABSENT 2 = PRESENT

**9. SEED SHAPE AND SIZE:**

[1] Hilum view: 1 = ELLIPTICAL 2 = OVAL 3 = ROUND

[3] Side view: 1 = OVAL 2 = ROUND 3 = KIDNEY 4 = TRUNCATE ENDS

[4] Cross section: 1 = ELLIPTICAL 2 = OVAL 3 = CORDATE 4 = ROUND

[28] GM. WEIGHT PER 100 SEEDS

[4] Classification: 1 = PEA 2 = MEDIUM 3 = MARROW 4 = KIDNEY 5 = PINTO

[0][5] MM. WIDTH *(Dorsal to ventral)* [0][4] MM. THICKNESS *(Side to side)*

[1][3] MM. LENGTH [0][1][2] WIDTH / THICKNESS X 10

5

**10. ANTHOCYANIN:** *(1 = Absent 2 = Present):*

[1] FLOWERS [1] STEMS [1] PODS [1] SEEDS [1] LEAVES

**11. DISEASE RESISTANCE** *(0 = Not tested; 1 = Susceptible; 2 = Resistant):*

| | | | |
|---|---|---|---|
| [0] | RUST *(Specify race)* _____ | [0] | ANGULAR LEAF SPOT |
| [0] | BACTERIAL WILT | [2] | COMMON BEAN MOSAIC |
| [0] | ANTHRACNOSE | [1] | YELLOW BEAN MOSAIC |
| [0] | SOUTHERN BEAN MOSAIC | [1] | FUSARIUM ROOT ROT |
| [1] | CURLY TOP | [2] | N.Y. 15 BEAN MOSAIC |
| [0] | POWDERY MILDEW | [0] | BEAN MOSAIC VIRUS 4 |
| [1] | HALO BLIGHT | [1] | FUSCOUS BLIGHT |
| [0] | ALFALFA MOSAIC VIRUS | [0] | ALFALFA MOSAIC VIRUS 2 |
| [0] | POD MOTTLE VIRUS | [0] | RED NODE VIRUS |
| [0] | ROOT KNOT NEMATODE | [ ] | OTHER *(Specify)* _____ |

**12. INSECT RESISTANCE:** *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

| | | | |
|---|---|---|---|
| [0] | APHIDS | [0] | LEAF HOPPERS |
| [0] | POD BORER | [0] | LYGUS |
| [0] | THRIPS | [0] | WEAVILS |
| [0] | SEED CORN MAGGOT | [ ] | OTHER *(Specify)* _____ |

**13. PHYSIOLOGICAL RESISTANCE:** *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

[0] HEAT [0] COLD [0] DROUGHT [ ] OTHER *(Specify)* _____

**REFERENCES:** The following publications may be used as a reference in completing this form:

1. Beans of New York. Vol. 1 Part II of Vegetables of New York. U.P. Hedrick et al. J. B. Lyon Company, Albany, N.Y. 1931.

2. Yarnell, S. H., Cytogenetics of the Vegetable Crops IV. Legumes. Bot. Rev. 31:247 - 330. 1965.

3. USDA Yearbook of Agriculture. 1937.

**COLOR:** Nickerson's or any recognized color fan may be used to determine the colors.